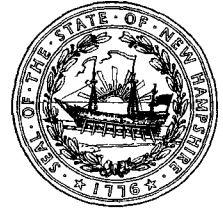




The State of New Hampshire
Department of Environmental Services



Michael P. Nolin
Commissioner

August 10, 2005

CERTIFIED MAIL
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RETURN RECEIPT REQUESTED

LETTER OF DEFICIENCY
No. WMD 05-021

Thermal Dynamics Corporation
82 Benning Street
West Lebanon, NH 03784-3403

Attn: Gregory Balch, Vice President of Operations

Re: Thermal Dynamics Corporation
West Lebanon, NH
EPA ID # NHD001080951

Dear Mr. Balch:

On June 24, 2005, the Department of Environmental Services, Waste Management Division ("DES") conducted an inspection of Thermal Dynamics Corporation ("TDC") in West Lebanon, NH. The purpose of the inspection was to determine TDC's compliance status relative to RSA Ch. 147-A and the New Hampshire Hazardous Waste Rules, Env-Wm 100-1100.

As a result of the inspection, the following deficiencies in TDC's hazardous waste management program were documented:

1. RSA 147-A:4/Env-Wm 353.04 – Limited Permit

At the time of the inspection, TDC was operating a wastewater evaporation unit without a Limited Permit. Rinse water from the parts washing areas (five in Building 1 and one in Building 5) is brought to and stored in an 1,100-gallon tank in Building 2. The rinse water is then pumped into the evaporation unit. As a result of evaporation, a hazardous waste sludge (NH01) is generated.

The evaporation unit meets the definition of a hazardous waste treatment facility within RSA 147-A:2, IV because it generates and accumulates a wastewater treatment sludge that is a hazardous waste as defined in Env-Wm 400 (*i.e.*, toxic). DES has no record of receiving a Limited Permit application form from TDC for the evaporation unit.

RSA 147-A:4, I requires any person who wishes to operate a hazardous waste treatment facility to first obtain a Limited Permit provided the operator meets the conditions specified in Env-Wm 353.04(b) through (o), including submission of a Limited Permit application form. Initial applications are subject to a \$500.00 fee, as referenced by Env-Wm 353.07(d).

If TDC wishes to continue to generate and accumulate a hazardous wastewater treatment sludge from the evaporation unit, then DES requests that TDC obtain a Limited Permit by complying with the requirements of Env-Wm 353.04(o), which include submitting a New Hampshire Limited Permit application form to DES.

2. Env-Wm 502.01 – Hazardous Waste Determination

At the time of the inspection, no formal waste determinations had been conducted on the evaporator sludge, rinse water, rags contaminated with lacquer, and the fluorescent light bulbs. At the time of the inspection, TDC informed DES that waste fluorescent light bulbs were routinely disposed of in the facility dumpster.

Env-Wm 502.01 requires that all generators of waste determine if their waste is a hazardous waste. Waste determined to be hazardous must be handled pursuant to the requirements of the Hazardous Waste Rules.

- (a) Waste fluorescent bulbs: DES requests that TDC determine whether the waste fluorescent bulbs are a hazardous waste by either applying knowledge of the hazardous properties of the waste fluorescent bulbs or by testing a representative sample of the waste fluorescent bulbs for the characteristic of toxicity as defined in Env-Wm 403.06. The analyses should include, at a minimum, RCRA metals, using the Toxicity Characteristic Leaching Procedure (TCLP) Method 1311 found in Test Methods for Evaluating Solid Wastes, SW-846.

Alternatively, TDC may elect to manage the waste fluorescent bulbs as “universal waste”, in accordance with Env-Wm 1100. Enclosed please find the DES Environmental Fact Sheet #WMD-HW-7, “Universal Waste Lamps: Management Requirements for Handlers and Transporters”, and a DES “Fluorescent Lamp and Ballast Recycling Facility” list to aid you with the determination.

TDC will need to provide DES with the results of the hazardous waste determination, along with any other supporting data, such as Material Safety Data Sheets (MSDS) and/or chemical analyses; or information indicating that the waste fluorescent light bulbs are being handled as a universal waste in accordance with Env-Wm 1100.

- (b) Evaporator sludge: DES requests that TDC determine whether the evaporator sludge is a hazardous waste by either applying knowledge of the hazardous properties of the evaporator sludge or by testing a representative sample of the evaporator sludge for any reason other than used oil (NH01). The analyses should include, at a minimum, RCRA metals, using the Toxicity Characteristic Leaching Procedure (TCLP) Method 1311 found in Test Methods for Evaluating Solid Wastes, SW-846.

TDC will need to provide to DES the results of the hazardous waste determination, along with any other supporting data, such as Material Safety Data Sheets (MSDS) and the requested chemical analyses.

- (c) Rinse water: DES requests that TDC determine whether the rinse water is a hazardous waste by either applying knowledge of the hazardous properties of the rinse water or by testing a representative sample of the rinse water. The analyses should include, at a minimum, RCRA metals, using the Toxicity Characteristic Leaching Procedure (TCLP) Method 1311 found in Test Methods for Evaluating Solid Wastes, SW-846.

TDC will need to provide to DES the results of the hazardous waste determination, along with any other supporting data, such as Material Safety Data Sheets (MSDS) and the requested chemical analyses.

- (d) Rags contaminated with lacquer: DES requests that TDC determine whether the rags contaminated with lacquer are a hazardous waste by either applying knowledge of the hazardous properties of the rags contaminated with lacquer or by testing a representative sample of the rags contaminated with lacquer. The analyses should include, at a minimum, the Toxicity Characteristic Leaching Procedure (TCLP) for organics using the method described in Env-Wm 403.06.

Alternatively, TDC may be able to manage the waste rags as “contaminated cloth wipers for laundering.” DES defines “contaminated wipers” as rags, shop towels, and wipers which have been used, contaminated with minor amounts of hazardous waste constituents such as solvents or oils, and are intended to be laundered before reuse. Please reference the enclosed DES Environmental Fact Sheet #WMD-HW-6, “Contaminated Cloth Wipers for Laundering,” to determine if this DES policy is applicable to your situation.

TDC will need to provide DES with the results of the hazardous waste determination, along with any other supporting data, such as Material Safety Data Sheets (MSDS) and/or chemical analyses.

On July 21, 2005, Daniel O'Neill provided material safety data sheets to confirm that the waste fluorescent bulbs were non-hazardous. No further action is required for item (a).

3. Env-Wm 507.01(a)(1) – Storage Requirements – Container Condition

At the time of the inspection, one (1) 55- gallon plastic container of hazardous waste acid/water (D002), stored in Building 5A was bulging. See the attached Container Inventory (“Inventory”).

Env-Wm 507.01(a)(1) requires generators to ensure that containers storing hazardous waste are in good condition.

DES requested that TDC transfer the contents of the container to a container that is in good condition and ensure that containers utilized in the future to store hazardous wastes remain in good condition.

In an email received on July 1, 2005 from TDC, Daniel O'Neill, Manufacturing Engineer, stated that the pressure was relieved from the container and the container is back to normal shape. No further action is required.

4. Env-Wm 507.01(a)(3) – Storage Requirements – Open Containers

At the time of the inspection, six (6) hazardous waste containers were not closed. See the attached Inventory.

- (a) Building 1: One 55-gallon container of oil was not closed.
- (b) Building 1: One 55-gallon container of oily solids was not closed.
- (c) Building 1: One 55-gallon container of acid/water was not closed.
- (d) Building 2: One 55-gallon container of oily solids was not closed.
- (e) Building 2: One 55-gallon container of evaporator sludge was not closed.
- (f) Building 5: One 55-gallon container of oily solids was not closed.

Env-Wm 507.01(a)(3) requires generators to ensure that containers storing hazardous waste be closed at all times, except when waste is being added to or removed from the containers.

DES requested that TDC ensure that containers storing hazardous waste remain closed at all times, except when adding waste to or removing waste from the containers.

In an email received on July 1, 2005 from TDC, Daniel O'Neill stated that all hazardous waste containers are now kept closed. No further action is required.

5. Env-Wm 507.03(a)(1)a. – Container Marking

At the time of the inspection, one (1) hazardous waste storage tank, located in Building 1, containing a waste acid/water mixture (D002) was not marked with the beginning accumulation date. See the attached Inventory.

At the time of the inspection, one (1) 55-gallon container of NH01 evaporator sludge, and one (1) 55-gallon container of hazardous waste oily solids, stored in Building 2, were not marked with beginning accumulation dates. See the attached Inventory.

Env-Wm 507.03(a)(1)a. requires that all containers used for the storage of hazardous waste be marked with the beginning accumulation date at the time they are first used to store hazardous wastes.

DES requests that TDC properly mark all containers of hazardous waste with the beginning accumulation date at the time they are first used to store waste.

In an email received on July 27, 2005 from TDC, Daniel O'Neill stated that all hazardous waste containers are now marked with the beginning accumulation date. No further action is required.

6. Env-Wm 507.03(a)(1) b., c., and d. - Container Marking

At the time of the inspection, the one (1) hazardous waste storage tank, located in Building 1, containing a waste acid/water mixture (D002) was not marked with the words "hazardous waste," and the EPA or state waste number. See the attached Inventory.

At the time of the inspection, the one (1) 55-gallon container of NH01 evaporator sludge, and the one (1) 55-gallon container of hazardous waste oily solids, stored in Building 2, were not marked with the words "hazardous waste," words that identify the contents of the container, and the EPA or state waste number. See the attached Inventory.

At the time of the inspection, one (1) 55-gallon container of hazardous waste oily rags, stored in Building 5, was not marked with the EPA or state waste number. See the attached Inventory.

Env-Wm 507.03(a)(1)b., c., and d. require that all containers used for the storage of hazardous waste be marked with the following information at the time they are first used to store wastes: the words "hazardous waste," words that identify the contents of the container, and the EPA or state waste number.

DES requests that TDC properly mark all containers of hazardous waste at the time they are first used to store waste with: the words "hazardous waste," words that identify the contents of the container, and the EPA or state waste number.

7. Env-Wm 509.02(a)(1) - Inspection Requirements

A review of TDC's Hazardous Waste Inspection Checklist ("Checklist") revealed that the time of the inspection and the specific area inspected were not documented. At the time of the inspection, TDC had also not documented the inspections of six (6) of the hazardous waste storage areas for 30 out of the 156 required weekly inspections during the last six months. In addition, inspections of the storage area in Building 5A had not been documented during the last three years.

Env-Wm 509.02(a)(1), which references 40 CFR 265.15, General Inspection Requirements, requires full quantity generators to conduct and document inspections of the facility, including the hazardous waste storage area(s). Per 40 CFR 265.15(d), the inspection records must include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions taken.

DES requested that TDC amend the existing Checklist to reflect the time of the inspection and to specify which hazardous waste storage area is being inspected. Also, ensure that weekly inspections of each hazardous waste storage area are routinely recorded in the updated Checklist.

In the email received on July 27, 2005 from TDC, Daniel O'Neill stated that the Checklist had been updated to include the time of the inspection and clarifies which area is being inspected. No further action is required.

8. Env-Wm 509.02(a)(2) – Personnel Training

A review of TDC's personnel training program revealed the following deficiencies:

- (a) The Alternate Emergency Coordinators identified below had not received initial hazardous waste training and/or taken part in annual reviews for the years noted:
 - 1. Bill Wolfel – 2004;
 - 2. Paul Page – 2004;
 - 3. Tony LaFramboise – 2000, 2001, 2002, 2003, and 2004; and
 - 4. Greg Balch - 2000, 2001, 2002, 2003, and 2004.
- (b) TDC was not providing hazardous waste training to one (1) of the two (2) employees responsible for handling hazardous waste. The employee is identified as David Wyzkiewicz.
- (c) TDC did not have a personnel training program for its employees responsible for handling hazardous waste.

Daniel O'Neill, Hazardous Waste Coordinator, was certified by DES as a NH Hazardous Waste Coordinator on December 9, 2004.

Env-Wm 509.02(a)(2), which references 40 CFR 265.16, Personnel Training, requires full quantity generators to maintain a personnel training program. This includes, but is not limited to, ensuring that initial training and annual reviews are conducted for personnel handling hazardous waste, and requires full quantity generators to maintain specific documents and records related to personnel training.

DES requests that TDC conduct and document hazardous waste training and annual reviews for all employees who have hazardous waste responsibilities, including the emergency coordinators. DES also requests that TDC maintain a written personnel training program which provides a description of the type and amount of introductory and continuing training that is given to persons filling each hazardous waste related position, and documentation of hazardous waste job titles, job descriptions, and names of employees filling each position.

*In the email received on July 14, 2005, Dan O'Neill provided a copy of TDC's personnel training plan. **TDC must provide training records for hazardous waste handlers and emergency coordinators, specifically Paul Page, Tony LaFramboise, and David Wyzkiewicz.***

9. Env-Wm 509.02(a)(4) – Preparedness and Prevention

The following deficiencies were noted regarding preparedness and prevention:

- (a) Adequate aisle space was not provided for twenty-three (23) 55-gallon containers of hazardous waste stored in the Building 5A Outdoor Storage Area. See the attached Inventory.

- (b) TDC did not have spill control equipment available at the storage area in the Building 5A Outdoor Storage Area.

Env-Wm 509.02(a)(4), which references 40 CFR 265 Subpart C, Preparedness and Prevention, requires generators to maintain required aisle space at each hazardous waste storage area. Required aisle space is further defined in Env-Wm 509.02(e) to mean not less than 2 feet of aisle space to allow for inspection of at least one side of each container.

In addition to the required aisle space, 40 CFR Part 265, Subpart C, Preparedness and Prevention, requires full quantity generators to maintain spill control equipment at each hazardous waste storage area, not more than 100 feet from each area, accessible along a clear path.

DES requested TDC to ensure that the required aisle space is maintained for each container of hazardous waste stored in the hazardous waste storage area.

In the email received on July 1, 2005 from TDC, Daniel O'Neill stated that the Building 5A Outdoor Storage Area now has two foot aisle space defined by yellow tape. In an e-mail dated July 8, 2005, DES also requested that TDC ensure that the required spill control equipment is maintained within 100 feet of the Building 5A Outdoor Storage Area. In the email received on July 27, 2005 from TDC, Daniel O'Neill stated that a spill kit had been stored in the Building 5A Outdoor Storage Area. No further action is required.

10. Env-Wm 509.02(a)(5) – Contingency Plan

A review of TDC's contingency plan revealed deficiencies regarding the following:

- (a) A physical description and a brief outline of the capabilities of emergency equipment;
- (b) Instructions to notify either the local fire chief or the National Response Center at (800)424-8802; and
- (c) Copies of the plan had not been submitted to the local authorities (police, fire, hospitals, contractors, and state and local emergency response teams).

Env-Wm 509.02(a)(5), which references 40 CFR 265, Subpart D, requires full quantity generators to maintain a complete contingency plan at the site.

DES requests that TDC revise and update its contingency plan to correct any deficiencies as identified in the enclosed Contingency Plan Module and submit a copy of the plan to the local authorities.

In the email received on July 27, 2005 from TDC, Daniel O'Neill provided an updated contingency plan for TDC.

TDC must submit a copy of the plan to the local authorities.

11. Env-Wm 509.02(a)(7) – Hazardous Waste Tanks

At the time of the inspection, TDC was accumulating waste acid/water mixture in a 165-gallon bulk storage tank. The tank was situated on a secondary containment pallet in Building 1.

Env-Wm 509.02(a)(7), which references 40 CFR Part 265, Subpart J, Tanks, requires full quantity generators, using tanks to accumulate or treat hazardous waste, to comply with certain tank standards, including but not limited to, conducting and documenting daily inspections of the tank system, and having in place spill prevention controls and overfill protection controls. In addition, generators are required to obtain a written assessment by an independent qualified registered professional engineer attesting that the system has sufficient structural integrity and is acceptable for storing hazardous waste. This written certification is required to be kept on file at the facility. Additionally, full quantity generators must ensure that specific design criteria are met for secondary containment and detection of hazardous waste releases.

DES requests TDC to ensure that the tank used to accumulate the waste acid water mixture is in compliance with the tank standards as specified in Env-Wm 509.02(a)(7), which references 40 CFR 265, Subpart J, Tanks, including, but not limited to, conducting and documenting daily inspections of the tank system and having in place spill prevention controls and overfill protection controls.

In addition, DES requests that TDC submit a copy of the completed tank assessment to DES and that TDC maintain a copy of the assessment on file at the facility. If TDC is unable to obtain a copy of the completed assessment, DES requests that a new assessment be conducted and submitted to DES. Additionally, TDC must ensure that the standards for secondary containment and detection of releases are met, as set forth in 40 CFR Part 265.193, Subpart J.

12. Env-Wm 509.02(b) – Emergency Posting

At the time of the inspection, TDC did not have an emergency posting at the nearest telephone in the following storage areas: Building 1- oil storage area, Building 1- acid storage area, Building 2- evaporator area/tank storage area, Building 5- machine area, and Building 5- hazardous waste storage area.

Env-Wm 509.02(b) requires that full quantity generators post a list of the steps to take if an emergency occurs and the following emergency numbers and information at the nearest telephone to the hazardous waste storage area:

- (a) The emergency coordinators (home and office);

- (b) The fire department, police department, and State of New Hampshire and local emergency response teams that may be called upon to provide emergency services, unless the facility has a 24-hour response team designated to provide emergency services whose number is posted; and
- (c) The location of fire extinguishers and spill control material, and if present, fire and internal emergency alarms.

DES requests that TDC post the required information at the nearest telephone to each hazardous waste storage area.

In an email received on July 19, 2005, Daniel O'Neill stated that the emergency posting had been posted. No further action is required.

13. Env-Wm 509.02(c)(2) – Full Quantity Generator Requirements

At the time of the inspection, the gate to the Building 5A Outdoor Storage Area was not locked.

Env-Wm 509.02(c)(2) requires all outdoor storage areas to have a means to control entry, at all times, through gates or other entrances to the hazardous waste storage area such as an attendant, television monitor, locked entrance or controlled roadway access to the area.

DES requested TDC to ensure that the Building 5A Outdoor Storage Area is locked when TDC employees are not actively working in the storage area.

In the email received on July 1, 2005, Daniel O'Neill stated that the Building 5A Outdoor Storage Area was locked and that a sign was posted instructing employees to keep the gate locked unless two employees were in attendance. No further action is required.

14. Env-Wm 510.03(h) – Manifest Requirements

At the time of the inspection, DES confirmed that TDC has used an incorrect EPA and/or State waste number, specifically NH02- corrosive solids, for oil related waste transported on the following hazardous waste manifests: MAQ638273, MAQ640922, MAQ638136, MAM178469, MAM176245, and MAM163916.

Env-Wm 510.03(h) requires that the manifest contain all of the information required in the Appendix to 40 CFR Part 262, 7-1-99 edition, which includes the four digit EPA and/or, if applicable, State waste number for the waste(s) transported.

DES requests that TDC use the correct EPA and/or State waste number on all manifests for future shipments of hazardous waste.

In the email received on July 19, 2005, Daniel O'Neill stated that TDC contacted its hazardous waste contractor, EnviroSafe Corporation and instructed them to use the correct EPA and/or State waste number on all future manifests. No further action is required.

15. Env-Wm 1102.03(c)(1) – Universal Waste Battery Management

At the time of the inspection, one (1) container of universal waste batteries was not closed. See the attached Inventory.

Env-Wm 1102.03(c)(1) requires universal waste containers to be closed, except when universal waste is being added to or removed from the container.

DES requested TDC to ensure that all containers of universal waste batteries are closed, except when universal waste is being added to or removed from the container.

In the email received on July 1, 2005 from TDC, Daniel O'Neill stated that the universal waste battery container was now kept closed. No further action is required.

DES believes the remaining portion of the cited deficiencies can be corrected and a report describing the corrective measures taken by TDC can be submitted within thirty (30) days of receipt of this letter. Supporting documentation that describes the measures taken to achieve compliance should be included with the report.

In the event compliance is not achieved within this period, DES may take further action against TDC including issuing an order requiring that the deficiencies be corrected, initiating an administrative fine proceeding, and/or referring the matter to the New Hampshire Department of Justice for imposition of civil penalties. In addition, DES personnel may re-inspect your facility at a later date to determine whether the facility has come into, and is maintaining, full compliance with the applicable rules. Fines may be pursued for any or all violations observed during this or subsequent inspections of the facility.

The written report as requested above should be addressed as follows:

Tammy Calligandes, Waste Management Specialist
DES/WMD
P.O. Box 95
Concord, NH 03302-0095

Enclosed you will find a copy of the completed Hazardous Waste Generator Inspection Report which documents the compliance status of your facility at the time of the inspection. This report may also be of value to you for use in determining future compliance with the New Hampshire Hazardous Waste Rules.

The State of New Hampshire Hazardous Waste Rules, as well as much other useful information, can be obtained from DES's website at <http://www.des.state.nh.us/hwcs/>, or by contacting the Public Information Center at (603) 271-2975.

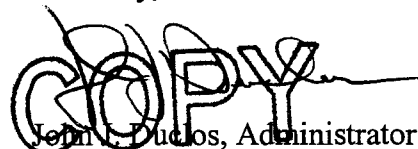
It is the goal of DES to promote the prevention of pollution at the source as the preferred option for meeting established environmental quality goals. We strive to ensure that pollution prevention options are considered first, followed by recycling, treatment and disposal. I am requesting that the DES's Pollution Prevention Coordinator, Stephanie D'Agostino, contact you

to discuss possibilities for waste minimization or source reduction at your facility. In the meantime, if you have immediate questions about pollution prevention, please feel free to contact her at 271-6398.

As a service to New Hampshire's hazardous waste generators, we maintain a Hazardous Waste Assistance Hotline which is available for you to contact our knowledgeable staff of hazardous waste inspectors. Our hazardous waste staff is available to answer your questions concerning the New Hampshire Hazardous Waste Rules and the compliance issues which affect your hazardous waste management program. The technical assistance available through the Hotline includes fact sheets that pertain to the management and recycling of specific wastes, summary sheets of specific sections of the Hazardous Waste Rules, copies of EPA and New Hampshire hazardous waste policy or regulatory interpretation letters that may benefit your operation, and networks with other state or federal agencies to answer your questions on a national level. The Hotline is available Monday through Friday, 8:00 AM to 4:00 PM at (1-866) HAZ-WAST (in-state only) or (603) 271-2942.

Should you have any questions regarding this letter, please contact the lead inspector, Tammy Calligandes, or Tod Leedberg, RCRA Compliance Supervisor at 271-2942. Thank you for your cooperation.

Sincerely,



John L. Duclos, Administrator
Hazardous Waste Compliance Bureau
Waste Management Division

cc: DB/RCRA/LOD/Archives
Anthony P. Giunta, P.G., Director, WMD
Paul L. Heritzler, P.G., Esq., Administrator, WMD
Gretchen Hamel, Administrator, DES Legal Unit
Daniel O'Neill, Thermal Dynamics Corp.

E-mail: JJD/SD

Enclosure: Hazardous Waste Generator Inspection Report
Wiper Fact Sheet